15

25

5

WHAT IS CLAIMED IS:

 A transport member essentially consisting of fiber-reinforced plastic,

wherein said fiber-reinforced plastic comprises:

at least one first layer containing a unidirectional reinforced fiber, oriented by -20° to +20° with respect to a longitudinal direction of said transport member, having a tensile elasticity of 500 to 1000 GPa; and

at least one second layer containing a unidirectional reinforced fiber, oriented by +75° to +90° and/or -75° to -90° with respect to said longitudinal direction of said transport member, having a tensile elasticity of 200 to 400 GPa.

- 2. A transport member according to claim 1, wherein said fiber-reinforced plastic further comprises at least one third layer containing a unidirectional reinforced fiber, oriented by +30° to +60° and/or -30° to -60° with respect to said longitudinal direction of said transport member, having a tensile elasticity of 500 to 1000 GPa.
- 20 3. A transport member comprising skin and core layers essentially consisting of a fiber-reinforced plastic;

wherein said skin layer comprises at least two first layers containing a unidirectional reinforced fiber, oriented by -20° to +20° with respect to a longitudinal direction of said transport member, having a tensile elasticity of 500 to 1000 GPa.

5

10

15

20

25

FP01-0173-00US-NM

- 4. A transport member according to claim 3, wherein said core layer comprises at least two second layers containing a unidirectional reinforced fiber, oriented by +75° to +90° and/or -75° to -90° with respect to said longitudinal direction of said transport member, having a tensile elasticity of 200 to 400 GPa; or at least one third layer containing a unidirectional reinforced fiber, oriented by +30° to +60° and/or -30° to -60° with respect to said longitudinal direction of said transport member, having a tensile elasticity of 500 to 1000 GPa.
- 5. A transport member comprising laminated skin and core layers made of carbon-fiber reinforced plastic;

wherein said skin layer comprises:

a first layer containing a first carbon fiber, oriented by an angle range of -20° to +20° with respect to a longitudinal direction of said transport member, having a tensile elasticity of 500 to 1000 GPa; and

a second layer containing a second carbon fiber, oriented by an angle range of +75° to +90° and/or -75° to -90° with respect to said longitudinal direction, having a tensile elasticity of 200 to 400 GPa.

- 6. A transport member according to claim 1, 3, or 5, wherein said transport member has a bending elasticity of 200 to 800 GPa in said longitudinal direction, and a bending elasticity of 30 to 100 GPa in a transverse direction thereof.
 - A transport member according to claim 3 or 5,

5

10

15

20

25

wherein said transport member satisfies the relationship represented by the following expression (1):

 T_{s} is the thickness of said skin layer; and T_{c} is the thickness of said core layer.

- 8. A transport member according to claim 3 or 5, wherein said first layer in said skin layer has a volume of 20 to 100 vol% in said skin layer.
- 9. A transport member according to claim 4 or 5, wherein said second layer has a volume of 0 to 80 vol% in said skin layer.
- 10. A transport member according to claim 4, wherein said third layer in said core layer has a volume of 0 to 20 vol% in said core layer.
- 11. A transport member according to claim 1, 3, or 5, wherein said transport member has a logarithmic vibration damping factor of 0.01 to 0.05 against bending vibration.
- 12. A transport member according to claim 3 or 5, wherein said core layer has a bulk specific gravity falling within the range of 0.03 to 1.7 and smaller than that of said skin layer.
- 13. A transport member according to claim 5, wherein said core layer comprises a honeycomb, a porous body, a corrugated sheet, a fiber-reinforced plastic, or a resin sheet.